

**Environmental
Product
Declaration**

According to ISO14025+EN15804+A2

This declaration is for:

SF86 Steel Fibre

Provided by:

ADFIL NV



MRPI® registration:

1.1.01232.2026

Program operator:

Stichting MRPI®

Publisher:

Stichting MRPI®

www.mrpi.nl

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COMPANY INFORMATION

ADFIL NV
Industriestraat 39
9240
Zeile
Belgium
+32 9 367 24 00
els.vannimmen@adfil.com
<https://www.adfil.com>

MRPI® REGISTRATION

1.1.01232.2026

DATE OF THIS ISSUE

22-6-2026

EXPIRY DATE

22-6-2031

SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by Anne Kees Jeeninga, Advieslab VOF. The LCA study has been done by Ruben van Gaalen & Marcus Kiessling, EcoReview. The certificate is based on an LCA-dossier according to ISO14025+EN15804+A2. It is verified according to the 'Verification protocol for MRPI LCA project report & EPD 21th of May 2025, V. 5.2'. EPDs of construction products may not be comparable if they do not comply with EN15804+A2. Declaration of SVHC that are listed on the 'Candidate list of Substances of Very High Concern for authorisation' when content exceeds the limits for registration with ECHA.

PROGRAM OPERATOR

Stichting MRPI®
Kingsfordweg 151
1043 GR
Amsterdam

PRODUCT

SF86 Steel Fibre

DECLARED UNIT / FUNCTIONAL UNIT

1 Mass (kg)

DESCRIPTION OF PRODUCT

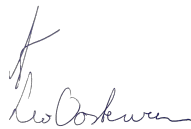
The Adfil SF86 is a hooked-end, glued steel fibre for use as discrete reinforcement in cementitious construction materials such as concrete, mortar, and grout. Manufactured from steel wire in accordance with EN 14889-1 (Group I, system 1) and ASTM A820, it may partially or fully replace conventional rebar depending on design requirements. Typical applications include industrial floors, tunnels, precast concrete elements, foundations, pavements, and wind power tower foundations.

VISUAL PRODUCT



MORE INFORMATION

<https://www.adfil.com>

Ing. L. L. Oosterveen MSc. MBA Managing Director MRPI	DEMONSTRATION OF VERIFICATION
	CEN standard EN15804 serves as the core PCR [1] Independent verification of the declaration and data according to ISO14025+EN15804+A2 Internal: External: X
	Third party verifier: Anne Kees Jeeninga, Advieslab VOF 
	[1] PCR = Product Category Rules

DETAILED PRODUCT DESCRIPTION

The Adfil SF86 is a steel fibre for use as discrete reinforcement in cementitious construction materials such as concrete, mortar, and grout. Manufactured from steel wire and supplied as hooked-end, glued fibres, it is designed to improve mechanical performance of the host material after cracking. It may partially or fully replace conventional reinforcement depending on design requirements. Produced in accordance with EN 14889-1 (Group I, system 1) and ASTM A820. Nominal steel density: 7.8 kg/dm³.

Common applications include industrial flooring, car parking garages, logistics warehouses, pile bearing floors, highway and bridge pavements, tunnels and subways, hydropower stations, precast concrete products, and towers of wind power generation.

The steel fibres are used exclusively in cementitious construction products, primarily concrete and precast concrete elements. They are not intended for asphalt applications and are applied in wind-energy and infrastructure projects only as reinforcement within concrete-based composite systems. Concrete products include ready-mixed concrete, in-situ concrete, industrial floors, slabs, foundations, pavements, tunnel linings, and other structural or non-structural concrete elements. Precast concrete products include panels, segments, pipes, and other factory-produced concrete elements.

The product is supplied in the original manufacturer packaging. No repacking or additional packaging is applied in this study.

Biogenic Carbon Content	Weight, kg
Biogenic Carbon in Product (in kg C)	0
Biogenic Carbon in Packaging (in kg C)	0,008
In the table, information describing the biogenic carbon content at factory gate (A1-A3) is described for Adfil SF86 Steel Fibre as per the EPD-CN-00008. If the mass of biogenic carbon containing materials in the product is less than 5% of the mass of the product, the declaration of biogenic carbon may be omitted (= 0 kg). If the mass of biogenic carbon containing materials in the packaging is less than 5% of the mass of the product, the declaration of biogenic carbon may be omitted (= 0 kg). Note: 1 kg biogenic carbon (C) is equivalent to 44/12 kg CO₂	

Component (> 1%)	(kg / %)
SF86 Steel Fibre	100%

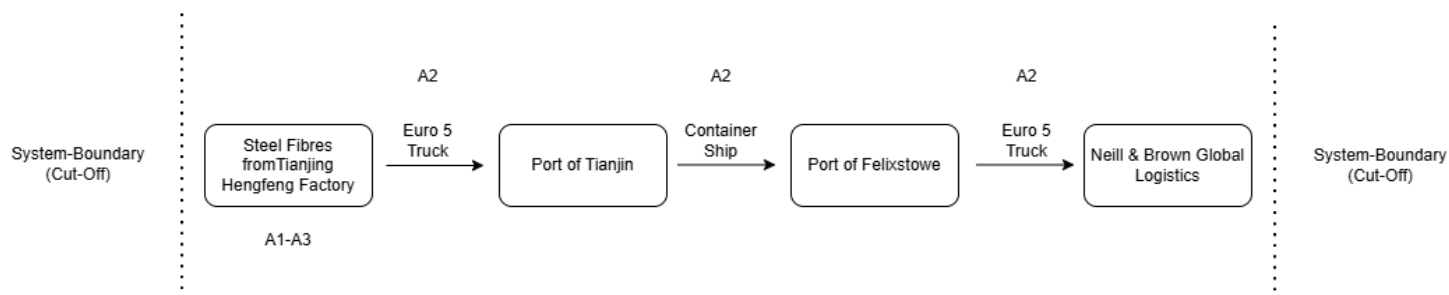
SCOPE AND TYPE

This LCA study complies with ISO 14040:2006, ISO 14044:2006, ISO 14025:2006, and EN 15804+A2 (CEN, 2019). LCA modelling was performed using SimaPro 9.6.0.1. The background database is EcoInvent 3.9.1 with EF 3.1 characterization factors, in line with the latest MRPI checklist requirements. EPD type: cradle-to-gate (A1-A3). The A1-A3 data is taken from reference EPD EPD-CN-00008 (Tianjin HengfengXuxiang New Material Co., Ltd., EPD China, September 2024) with an additional transport scenario to the UK logistics centre at Neill & Brown Global Logistics, Hessele.

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport gate to site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse - Recovery - Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

X = Modules Assessed

ND = Not Declared



REPRESENTATIVENESS

This EPD is representative for SF86 Steel Fibre produced by Tianjin Hengfeng Xuxiang New Material Co., Ltd. in Shuangtang Town, Jinghai District, Tianjin, China (A1-A3), and transported via Euro 5 truck, container ship, and Euro 5 truck to the Neill & Brown Global Logistics centre in Hessle, United Kingdom. The declared unit is 1 kg of SF86 Steel Fibre.

ENVIRONMENTAL IMPACT per functional unit or declared unit (core indicators A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	1,87E+00	2,49E-01	5,90E-04	2.12E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-fossil	kg CO2 eq.	1,89E+00	2,49E-01	5,89E-04	2.14E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-biogenic	kg CO2 eq.	-2,06E-02	-1,14E-05	6,09E-07	-2.06E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	kg CO2 eq.	1,66E-03	1,73E-04	8,82E-08	1.83E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ODP	kg CFC11 eq.	1,63E-08	4,06E-09	1,27E-11	2.04E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
AP	mol H+ eq.	9,09E-03	6,32E-03	2,09E-06	1.54E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EP-fresh water	kg P eq.	7,12E-04	1,09E-06	5,21E-09	7.13E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EP-marine	kg N eq.	2,18E-03	1,60E-03	8,28E-07	3.78E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EP-terrestrial	mol N eq.	2,00E-02	1,77E-02	8,83E-06	3.77E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
POCP	kg NMVOC eq.	7,15E-03	4,85E-03	3,07E-06	1.20E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ADP-minerals & metals	kg Sb eq.	5,36E-06	2,67E-07	3,96E-10	5.63E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ADP-fossil	MJ, net calorific value	2,04E+01	3,15E+00	7,89E-03	2.36E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
WDP	m3 world eq. Deprived	0,00E+00	9,96E-03	3,14E-05	3.31E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

GWP-total	=	Global Warming Potential total
GWP-fossil	=	Global Warming Potential fossil fuels
GWP-biogenic	=	Global Warming Potential biogenictotal
GWP-luluc	=	Global Warming Potential land use and land use change
ODP	=	Depletion potential of the stratospheric ozone layer
AP	=	Acidification Potential, Accumulated Exceedence
EP-freshwater	=	Eutrophication Potential, fraction of nutrients reaching freshwater end compartment
EP-marine	=	Eutrophication Potential, fraction of nutrients reaching marine end compartment
EP-terrestrial	=	Eutrophication Potential, Accumulated Exceedence
POCP	=	Formation potential of tropospheric ozone photochemical oxidants
ADP-minerals & metals	=	Abiotic Depletion Potential for non-fossil resources [1]
ADP-fossil	=	Abiotic Depletion for fossil resources potential [1]
WDP	=	Water (user) deprivation potential, deprivation-weighted water consumption [1]

Disclaimer [1]:

- The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ENVIRONMENTAL IMPACT per functional unit or declared unit (additional indicators A2)

Unit		A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PM	Disease incidence	0,00E+00	9,76E-09	8,65E-12	9,77E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
IRP	kBq U235 eq.	0,00E+00	8,10E-04	3,62E-06	8,13E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETP-fw	CTUe	0,00E+00	1,54E+00	3,47E-03	1,54E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP-c	CTUh	0,00E+00	1,02E-10	1,09E-12	1,04E-10	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP-nc	CTUh	0,00E+00	1,00E-09	2,83E-12	1,00E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SQP	-	0,00E+00	8,37E-01	5,91E-04	8,37E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

- PM = Potential incidence of disease due to PM emissions
- IRP = Potential Human exposure efficiency relative to U235 [1]
- ETP-fw = Potential Comparative Toxic Unit for ecosystems [2]
- HTP-c = Potential Comparative Toxic Unit for humans, cancer [2]
- HTP-nc = Potential Comparative Toxic Unit for humans, non-cancer [2]
- SQP = Potential soil quality index [2]

Disclaimer [1]:

- This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste.

Disclaimer [2]:

- The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

OUTPUT FLOWS AND WASTE CATEGORIES per functional unit or declared unit (A1 en A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	6,55E-05	1,64E-05	5,06E-08	8,20E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NHWD	kg	6,28E-01	6,27E-02	2,68E-05	6,91E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RWD	kg	1,67E-05	4,57E-07	2,47E-09	1,72E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

HWD = Hazardous Waste Disposed
 NHWD = Non Hazardous Waste Disposed
 RWD = Radioactive Waste Disposed
 CRU = Components for reuse
 MFR = Materials for recycling
 MER = Materials for energy recovery
 EEE = Exported Electrical Energy
 ETE = Exported Thermal Energy

RESOURCE USE per functional unit or declared unit (A1 and A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	2,09E+00	2,59E-02	9,90E-05	2,12E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,09E+00	2,59E-02	9,90E-05	2,12E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRE	MJ	2,04E+01	3,15E+00	7,89E-03	2,36E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,04E+01	3,15E+00	7,89E-03	2,36E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	0,00E+00	3,29E-04	1,13E-06	3,31E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

PERE	=	Use of renewable primary energy excluding renewable primary energy used as raw materials
PERM	=	Use of renewable primary energy resources used as raw materials
PERT	=	Total use of renewable primary energy resources
PENRE	=	Use of non-renewable primary energy resources excluding non-renewable energy resources used as raw materials
PENRM	=	Use of non-renewable primary energy resources used as raw materials
PENRT	=	Total use of non-renewable primary energy resources
SM	=	Use of secondary materials
RSF	=	Use of renewable secondary fuels
NRSF	=	Use of non-renewable secondary fuels
FW	=	Use of net fresh water

CALCULATION RULES

Data quality: The data quality was assessed using the qualitative representativeness categories very good, good, fair, poor and very poor, considering geographical, technical and temporal representativeness. The A1 to A3 source data from the China source EPD are assessed as good overall for the purpose of this declaration. The data are technically representative for steel fibre production and geographically representative for production in China. The primary data period in the source EPD is July 2023 to June 2024. Limitations remain because the China source EPD does not disclose the full foreground inventory, detailed electricity consumption, or the electricity source used in production.

Data collection period: The dataset is representative for the reference year July 2023 to June 2024, based on the China source EPD for steel fibre for concrete reinforcement.

Methodology: ecoinvent 3.9.1 is used as the background database. The source EPD was modelled using SimaPro 9.5. Additional modelling in this study uses ecoinvent 3.9.1.

Electricity: The electricity consumption of the manufacturing process is included in the A1 to A3 results taken from the China source EPD. However, the source EPD does not disclose electricity consumption in kWh per declared unit and does not specify the electricity mix or contractual electricity source used. Therefore, it cannot be confirmed whether the original EPD applied a market based or location based electricity approach. To avoid double counting, no additional A3 electricity consumption has been added. For additional modelling outside the China source EPD, ecoinvent 3.9.1 datasets are used with their default electricity modelling.

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

A1. Raw material supply: The main raw material is steel wire rod. All materials needed for production and packaging are taken into account. A1 data is taken directly from reference EPD EPD-CN-00008 (Steel fiber for concrete reinforcement, Tianjin HengfengXuxiang New Material Co., Ltd., EPD China, September 2024, reference year July 2023 to June 2024).

A2. Transport of raw materials to manufacturer: Transportation of raw materials to the Tianjin factory is included within the reference EPD data.

A3. Manufacturing: Steel fibres are manufactured from steel wire at the Tianjin HengfengXuxiang factory. The fibres are hooked-end, glued and bundled. Container handling at the Port of Tianjin is included (A3).

Transport scenario (A2/A3): Euro 5 truck from Tianjin Hengfeng Factory to Port of Tianjin (0.09 tkm) | Container ship from Port of Tianjin to Port of Felixstowe, UK (20.34 tkm) | Container handling at Port of Felixstowe (A3) | Euro 5 truck from Port of Felixstowe to Neill & Brown Global Logistics, Hesse (0.33 tkm). The fibres remain in their original packaging throughout the entire logistics chain — no re-packing or additional processing at any stage.

End-of-life (modules C and D): Not declared. The product meets all three EN15804+A2 exemption criteria: it becomes permanently integrated into the concrete matrix during installation, is no longer separable or identifiable at end of life, and contains no biogenic carbon.

The steel fibre product itself does not contain biogenic material and has a biogenic carbon content of 0 kg C per declared unit. The accompanying packaging has a biogenic carbon content of 0.008 kg C per declared unit, as stated in the China source EPD. This value is declared as biogenic carbon content in kg C, not as kg CO₂. For transparency, 0.008 kg C corresponds to approximately 0.029 kg CO₂ using the conversion factor 44 divided by 12.

The packaging material types reported in the China source EPD are ton bag, paper bag and wood. The reported packaging weights are ton bag 0.0009 kg, paper bag 0.0092 kg and wood 0.0080 kg per declared unit. No repacking is applied in this study. Therefore, no additional packaging material and no additional biogenic carbon are modelled.

DECLARATION OF SVHC

Substances of Very High Concern (SVHC) listed on the Candidate List of Substances of Very High Concern for authorisation are declared when contents exceed the limits for registration with ECHA. No SVHC above threshold have been identified for SF86 Steel Fibre.

REFERENCES

ISO 14025:2006 — Environmental labels and declarations: Type III environmental declarations. ISO 14040:2006 — Environmental management: Life cycle assessment — Principles and Framework. ISO 14044:2006 — Environmental management: Life cycle assessment — Requirements and guidelines. CEN EN 15804:2019+A2 — Sustainability of construction works: Environmental product declarations. EPD-CN-00008 — Steel fiber for concrete reinforcement, Tianjin HengfengXuxiang New Material Co., Ltd., EPD China, September 2024. NEN-EN 15804:2012+A1:2013 — Duurzaamheid van bouwwerken — Milieuverklaringen van producten. PRé Sustainability — SimaPro 9.6.0.1. <https://simapro.com/> Ecoinvent database version 3.9.1 Environmental Footprint (EF) version 3.1 characterization factors.